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EXAMINER

MAUNG, ZARNI

ART UNIT

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2151

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DELIVERY MODE

10/11/2007

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/752,487

Applicant(s)

GUILFORD ET AL.

Examiner

Zarni Maung

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) ☐ Responsive to communication(s) filed on 12 July 2007.

2a) ☒ This action is **FINAL**.

2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) ☒ Claim(s) 1-7 and 9-104 is/are pending in the application.

4a) Of the above claim(s) 15-83 and 86-104 is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-7, 9-14, 36-49, 84-85 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date \_\_\_\_\_

4) ☐ Interview Summary (PTO-413)

Paper No(s)/Mail Date. \_\_\_\_\_

5) ☐ Notice of Informal Patent Application

6) ☐ Other: \_\_\_\_\_

This communication is responsive to the response filed on July 12, 2007. Claims 1-7, 9-14, 36-49 and 84-85 remain pending.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7, 36-39, and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn et. a. US 6,591,103 (Dunn hereinafter) in view of Sainton (US 5,761,621).

Regarding claims 1 and 36, Dunn teaches substantial features of the invention as claimed, including:

receiving a service request at the home network provider from the wireless associated with a subscriber to a home network device, thus over an established connection (col. 3, lines 39-41 and col. 7, lines 3-5; user device which is tuned to the home register via CSA );

determining, based on a collection of information "table" downloaded to the wireless device associated with the subscriber to the network (col. 4, lines 8-10, col. 5, lines 27-30; col. 8, lines 13-17, 42-47, 55-60) whether one of the plurality of wireless networks can provide the requested service (col. 3, lines 34-45, 54-64) if one of the plurality of wireless networks can provide the requested service the home network; choosing the one wireless network of the plurality of wireless networks for the wireless device from the one of the plurality of wireless networks can provide the requested service the home network (col. 5/lines 26-43); establishing a connection between the wireless device and the home network using a low bandwidth connection if the wireless device is registered with a roaming service provider (see column 3, lines 40-57; the low bandwidth connection is inherently established between the user device and home network when user device tunes to the home network, and a roaming service is used when handoff or hand over occurred);

Dunn does not explicitly teach where the collection of information is downloaded from the home network provider. Sainton' disclosure regarding an adaptive service provider selection (col. 2, lines 35-42) teaches an alternative method for downloading to the wireless device information regarding the services offered from each service carrier providers typically advertised and/or broadcasted. Specifically, wherein instead of being broadcasted by each wireless service provider, the information from all providers is compiled and broadcasted by a single entity (Fig. 10) for use in selecting carriers, this information may be broadcast in each geographical region by a transmitter, downloaded by the wireless device on predetermined channel, as part of a consumer service (col.

19, lines 26-44); and if one of the plurality of wireless service providers can provide the requested service selecting one of the available wireless service providers that can provide the requested service (col. 17, lines 58- col. 18, line 18). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Sainton for downloading information from a service provider to the wireless device because in doing so the wireless device in the Dunn system in a coverage area where three or more communication networks compete, where at any given location and time dependent upon load, position, quality of service (e.g. building interference), any of these services might provide the best service for a given user, a selection method to choose the best one is desirable (Dunn col. 1, lines 37-51 and col. 5, lines 17-30). One would be motivated to utilize a service provider in each geographical region transmit information of the various carriers networks as a consumer service part of the service provider in network comprising one or more geographical regions to further encourage service competition as assist in selecting the most appropriate carrier as suggested by Sainton (col. 19, lines 26-44). Further, including choosing a network based on cost when receiving a user service request at the home network, as suggested by Sainton (col. 14, lines 25-43) to further provide this consumer service part of the home service provider in home network.

Regarding claim 2 and 37, wherein the choosing act further comprises choosing at least one network based at least in part on quality of service (Dunn col. 10, lines 29-33, Sainton col. 2, lines 48-50).

Regarding claim 3 and 38, wherein the choosing act further comprises choosing the one wireless network based at least in part on cost of service (Dunn col. 8, lines 26-29, Sainton col. 2, lines 48-50).

Regarding claim 4 and 39, wherein the choosing act further comprises choosing the one wireless network based at least in part on preferred provider agreements (Sainton: col. 19; lines 48-56).

Regarding claim 5, wherein the choosing act further comprises choosing the one wireless network based at least in part on network capacity (e.g. bandwidth) (Dunn col. 5, lines 58-64).

Regarding claim 6 and 42, wherein the choosing act further comprises choosing the one wireless network based at least in part on a network load (e.g. congestion/traffic) associated with a wireless network presently serving the wireless device (Dunn col. 5, lines 58-64).

Regarding claim 7 and 43, wherein the choosing act further comprises choosing the one wireless network based further on a wireless network load/congestion of other wireless networks of the plurality of wireless networks (Dunn col. 5, lines 58-64, and col. 6, lines

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23-26).

Claims 9-14, 40-41, 44-49 and 84-85, rejected under 35 U.S.C. 103(a) as being unpatentable over Dunn in view of Sainton in further view of Zicker (US 6,159,625).

Regarding claims 9 and 14, although the applied references teach that the plurality of wireless networks carriers change price, network capabilities (Dunn col. 1, lines 37-62) the wireless networks broadcast their location, frequency availability and bandwidth price and that this information is used for wireless network selection (Dunn col. 8, lines 26-29), however the applied references do not explicitly teach wherein the collection of information "table" is downloaded on a periodic basis, i.e. periodically.

Zicker teaches downloading a predetermined period of time information about each of the plurality of wireless network carriers (col. 20, lines 50-63), including periodically downloading to the wireless device a list of network identifiers for choosing one wireless network of the plurality of wireless networks for the wireless device (col. 5, lines 5-25) including a periodic basis (col. 10, lines 55-64). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Zicker for downloading information about the wireless network carrier available and not available for use by the wireless device in the Dunn system. One would be motivated to select based on the rates charged by the competing foreign wireless network systems, where the rate structures may be complicated, and they may change from time to time. Thus, when roaming, it is desirable to obtain sufficient

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information upon which to base an intelligent foreign cellular system selection decision can be made, as suggested by Zicker.

Regarding claim 10, wherein the table is downloaded on a periodic basis according to updated roaming agreements (Dunn col. 9, line 64-col. 10, line 5).

Regarding claim 11, wherein the table is downloaded on a periodic basis according to when the wireless device is on e.g. during handshake procedures (Sainton col. 3, lines 13-19).

Regarding claims 12 and 13, wherein the wireless device is roaming outside a home service area, and wherein the wireless device is operating inside a home service area (Dunn: col. 6, lines 15-26).

Regarding claim 40-41, wherein the quality of service relates to a threshold level of toleration for delay in data transmission (e.g. congestion) (Dunn col. 5, lines 58-64); wherein the quality of service relates to a minimum data rate (Dunn col. 9, lines 44-52).

Regarding claims 44-45, wherein the wireless device is operating outside a home service area (Dunn col. 4, lines 51-col. 5, line 2) and wherein the wireless device is operating within a home service area (Dunn: col. 6, lines 15-26)

Regarding claim 46, comprises limitation substantially the same as claim 1, same rationale of rejection is applicable. Further limitations include the chosen wireless network supporting the service request from the wireless device within the predetermined parameter (e.g. requirement, costs) (Dunn col. 8, lines 10- 29).



Regarding claim 47, wherein the chosen wireless network has the strongest signal of the plurality of wireless networks capable of supporting the service request (Sainton col. 16, lines 34-37).

Regarding claim 48-49, wherein the plurality of wireless networks are associated with the wireless device in its home service area and wherein the plurality of wireless networks are associated with the wireless device while roaming (Dunn: col. 6, lines 15-26).

Regarding claim 84, receiving a service request at the home network provider from the wireless device over a connection (Dunn col. 3, lines 39-41 and col. 7, lines 3-5); the home network provider assist/command "directing" the wireless device to register with a first network of the plurality of networks (Dunn col. 13, lines 11-14); and if a service request from the wireless device would be better served by a network of the plurality of networks other than the first network, establishing a parallel communication session with a second network of the plurality of networks to process the service request (Dunn col. 10, lines 35-41 and 4, line 61 to col. 5, line 3).

Regarding claim 85, receiving a service request from the wireless device over a connection (Dunn col. 3, lines 39-41 and col. 7, line 3-5); determining by the home network service provider whether the network service provider "different" could provide the requested service according to predetermined parameters (e.g. cost, requirements, quality) (Dunn col. 4, lines 8-10, col. 5, lines 27-30) based on a collection of information "table" downloaded to the wireless device (Dunn col. 8, lines 13-17, 42-47, 55-60)

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whether one of the plurality of wireless networks can provide/mach the requested service (Dunn col. 3/lines 34-45, 54-64), wherein if one of the plurality of wireless service providers can provide the requested service selecting one of the available wireless service providers that can provide the requested service (Sainton col. 17, lines 58-col. 18, line 18); and if the predetermined parameters match, the home network service provider directing the wireless device to obtain the requested service from the different network service provider, such as to register with the visitor register with the different network service provider to provide the requested service (Dunn col. 11, lines 18-21 and cool. 5, lines 26-43) including if one of the plurality of wireless service providers can provide the requested service selecting one of the available wireless service providers that can provide the requested service (Sainton col. 17, lines 58-col. 18, line 18).

#### Response to Arguments

As per applicant arguments filed on July 12, 2007, the applicant argued in substance that:

Claim 1 recites a method of selecting a wireless network from a plurality of wireless networks available to a wireless device "associated with a subscriber to a home network".

In response to the above-mentioned argument, applicant's interpretation of the instant application has been reviewed.

According to Dunn, "selection system and method of operation which enables a

user to obtain communication services in heterogeneous or homogeneous wireless network using different protocols and frequencies at the most economical cost and bandwidth...". Dunn further teaches that the user device can use a home network and/or CSA to establish a wireless communications (col. 3, lines 23-58). In the case of wireless communication with a home network, the device is associated with that home network. In addition, [0053] the wireless device 12 stores a table that provides a list of preferred service providers from which the wireless device 12 should select. An example table is illustrated in FIG. 3 and will be discussed in more detail below. The table may be a routing table or any other table or grouping of information according to the respective protocol used to direct the wireless device 12 regarding changing its communication link to another platform or service provider. The home service provider downloads the table on a periodic basis to the wireless device 12. The table may then be updated by the network on a weekly, monthly or some other, basis such as when the wireless device 12 is powered up or when roaming agreements' change or rates for transmitting traffic over various networks change. Dunn teaches the aspect of "the establishing the comprises the connection comprises establishing a low bandwidth connection between the wireless device and the home network if the wireless device is registered with a roaming service provider.." when the user device tunes to the home network, and a roaming service is used when handoff or hand over occurred. Dunn [0056] FIG. 3 illustrates a roaming wireless device 12 communicating through a current roaming service provider 40 with the home service provider 42. Using this arrangement, the wireless device 12 can receive the updated table for the present invention. The

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applicant's interpretation of the applied reference and understanding of a "home network" has been considered. However, the claim merely recites a home network not an "entity" as argued.

Applicant's arguments filed with the above mentioned response have been fully considered but not found persuasive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zarni Maung whose telephone number is (571) 272-3939. The Examiner can normally be reached on Monday-Friday from 8:30 to 5:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Valencia Martin-Wallace can be reached at (571) 272-3440. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see <http://pair-direct.uspto.gov> or the Electronic Business Center at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

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**PRIMARY EXAMINER**